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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,716	01/24/2002	Lawrence E. Jordan	839-1146	7123

7590 10/08/2003

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EXAMINER

MOHANDESI, IRAJ A

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/053,716	JORDAN ET AL.	
	Examiner	Art Unit	
	Iraj A Mohandesi	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-28 and 37-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-26, 28, 37-44 and 46 is/are rejected.
- 7) ☒ Claim(s) 27, 45 is/are objected to.
- 8) ☒ Claim(s) 47-56 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____



DETAILED ACTION

1. The election on the group I, claims **21-28 and 37-46** with out traverse has been acknowledged by Examiner.
2. **Claims 47-56** are method of forming an electric machine, they will be considered a restricted non-elected group ,since the new **claim 47** contains the same claim language.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. **Claim 21 and 37** recite the limitation "the cylinder" and "said cylinder" in page 15,line 8 and page 2, line2.

There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 21-23,37-41** are rejected under 35 U.S.C. 102(b) as being anticipated by **Rielly US patent 4,146,809**

Rielly'809 discloses a rotor (1) and a rotor winding (11) disposed on the rotor, the rotor winding having a body portion (3) and end turn portions (9), and a non-metallic cylinder (13,column,line 40 made of non-metallic graphite epoxy) arranged around the rotor to restrain both the body portion and the winding against forces resulting from a rotation of

the rotor; wherein no portion of an inner circumference of the cylinder is smaller than an outer circumference of the rotor

(see Fig.1,), the rotor body portion extend along rotational axis of the rotor and two end portion, the cylindrical part extends along the rotational axis of the rotor and surrounds the body portion of the rotor (see Fig.1,) ,a plurality of slots (24, column 2, line 24, Fig.2, 30.).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 24,25,42 and 43** rejected under 35 U.S.C. 103(a) as being unpatentable over **Sika'643** in view of **Ganti US patent 6,291,919**.

Rielly'809 discloses a rotor (1) and a rotor winding (11) disposed on the rotor, the rotor winding having a body portion (3) and end turn portions (9), and a non-metallic cylinder (13, column, line 40 made of non-metallic graphite epoxy) arranged around the rotor to restrain both the body portion and the winding against forces resulting from a rotation of the rotor; wherein no portion of an inner circumference of the cylinder is smaller than an outer circumference of the rotor

(see Fig.1,), the rotor body portion extend along rotational axis of the rotor and two end portion, the cylindrical part extends along the rotational axis of the rotor and surrounds

Art Unit: 2834

the body portion of the rotor (see Fig.1,) ,a plurality of slots (24, column 2,line 24, Fig.2,30.).

However **Rielly'809** teaches all limitations of claimed invention except a cylinder enclosure with a plurality of holes.

Ganti,919 disclosed a non-metallic rotor enclosure with a plurality of holes (see 42, Fig. 6) for the purpose of ventilation.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was mad to combine **Rielly'809** rotor with a non-metallic rotor enclosure having a plurality of holes as taught by **Ganti,919** for the purpose of ventilation.

8. **Claims 28,46**are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rielly'809, and Ganti,919** as applied to **claims 21-25,37,39-41** above, and further in view of **Laskaris US patent 3,991,333**.

However the combination of **Rielly'809, and Ganti,919** fails to teach a groove on rotor and protrusion on cylinder to engaged the groove.

Laskaris'333 teaches a winding support for a rotor having a groove on rotor and protrusion on cylinder (37) for the purpose of connecting the cylinder enclosure with the rotor.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was mad to modify the combination of **Rielly'809, and Ganti,919** with a groove on rotor and protrusion on cylinder as taught by **Laskaris'333** for the purpose of connecting the cylinder enclosure with the rotor.

9. **Claims 26 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over combination of **Rielly'809, and Ganti,919** modified by **Laskaris'333** as applied to claims **21-26,27,37-44** above, and further in view of **Ishida US patent 6,586,853**

However combination of **Rielly'809, and Ganti,919** modified by **Laskaris'333** fails to teach a fan arranged at an axial end of the rotor

Ishida'853 teaches a rotor having a fan (14 Fig.1) arranged at an axial end of the rotor for the purpose of generating air flow in to the rotor winding.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide to the combination of **Sika'643, and Ganti,919** which was modified by with a **Laskaris'333** a fan arranged at an axial end of the rotor as taught by **Ishida'853** for the purpose of generating air flow in to the rotor winding.

Allowable Subject Matter

10. **Claims 27 and 45** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Communication

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A Mohandesi whose telephone number is (703)305-3242. The examiner can normally be reached on M-F.

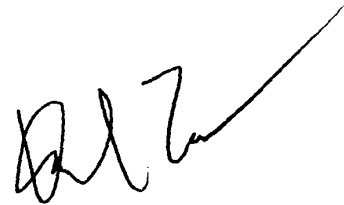
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 10/053,716
Art Unit: 2834

Page 6

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-0377.

IM September 10, 2003

A handwritten signature in black ink, appearing to read 'Karl Tamai', with a long, sweeping horizontal stroke extending to the right.

KARL TAMAI
PRIMARY EXAMINER